

ISMAILOV, D. T.

Dissertation: "Effect of Superphosphate in Organomineral Granules on the Yield of Cotton in Azerbaydzhan." Cand Agr Sci, Moscow Academy of Agriculture Imeni K. A. Timiryazev, Moscow, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 4, Feb 54)

SO: SUM 243, 19 Oct 54

IZMAYLOV, F.

36770. IZMAYLOV, F. i CHICHAYEV, I. Po povodu stat'i (F. Uchevatkina i P. Kryuchkovoy) "Letniye posevy lyutserny v rastushchiy khlopchatnik", opublikovannoy v gazete "Pravda Vostoka" 20 avgusta 1949 qoda. Sots. sel. khoz-vo Uzbekistana, 1949, No. 4, c. 82-84

SO: "etopis' Zhurnal'yinkh Statey, Vol. 50, Moskva, 1949

IZMAYLOV, F.

Leading driver of the Alma-Ata bus and taxi station. Avt.transp.
32 no.6:38 Je '54. (MLRA 7:9)

1. Alma-Atinskiy avtobusno-tekhnicheskii park.
(Beliaev, Vladimir Mikhailovich)

IZMAYLOV, G.A. (Mordovskaya ASSR, Saransk, 1-y Sovetskiiy per., d.15)

Combination of perforation and acute bleeding from a gastric
ulcer. Klin.khir. no.9:80-81 S '62. (MIRA 16:5)

1. 1-ye khirurgicheskoye otdeleniye Respublikanskoy bol'nitsy
Mordovskoy ASSR.

(STOMACH—ULCERS)

IZMAYLOV, G.A.

Measurement of the weight concentration of dust in air by means of
beta rays. Zav.lab. 27 no.1:40-43 '61. (MIRA 14:3)

1. TSentral'naya laboratoriya avtomatiki.
(Dust) (Beta rays)

IZMAYLOV, G.A. (MASSR, Saransk, Pervyy Sovetskiy per., d.15)

Diagnosis of suppurating cysts of the urachus. Nov. khir. arkh.
no.9:80 S '61. (MIRA 14:10)

1. 1-ya khirurgicheskoye otdeleniya (zav. - zasluzhennyy vrach
Mordovskoy ASSR M.P.Yurtaykina) Respublikanskoy bol'nitsy Mordovskoy
ASSR.

(URINARY ORGANS—DISEASES)

IZMAYLOV, G.A.

Diagnostic errors in strangulated traumatic diaphragmatic hernia.
Klin. khir. no.1:71-72 '65. (MIRA 18:8)

1. 1-ye khirurgicheskoye obbladeniye Respublikanskoy bol'nitsey
Mordovskoy ASSR.

KLYUYEV, I.I.; SHAVENZOVA, Ye.Z.; IZMAYLOV, G.A. (Mordovskaya ASSR,
Saransk, 1-y Sovetskiy per., d.15)

Radical surgical treatment of elephantiasis of the lower
extremities. Ortop., travm. i protez. 24 no.3:60-62 Mr '63.
(MIRA 17:2)

1. Iz 1-go khirurgicheskogo otdeleniya Respublikanskoy
bol'nitsy Mordovskoy ASSR.

ИМАШИН, Г.А. (Саранск, Мордовской АССР, Изд. Советский, 1964, 4.18)

Extraperitoneal ruptures of the duodenum. Vest. Kir. 92
no.2:88-90 F '64. (PIRA 1749)

1. Из 1-го хирургического отделения республиканской
больницы (главный врач - В.Г. Мисков) Мордовской АССР.

12 MAYLOV, G.S.

Echinococcosis of the mammary gland. Khirurgia no.6:67 Je '55.
(BREAST--HYDATIDS) (MLRA 8:10)

IZMAYLOV, G.S.

Osteoma of the mastoid process. Vest.oto-rin. 18 no.5:112 8-0 '56.
(MASTOID PROCESS--TUMORS) (MIRA 9:11)

IZMAYLOV, G.S. (Leningrad)

Adaptive function of the sympathetic innervation of the nasal mucosa.
Zhur. ush., nos. i gorl. bol. 20 no.4:18-21 J1-Ag '61..

(MIRA 14:6)

1. Iz kafedry otorinolaringologii (nachal'nik - zasluzhennyy
deyatel' nauki prof. K.L.Khilov) Voenno-meditsinskoy ordena
Lenina akademii imeni S.M.Kirova.

(NOSE—INNERVATION)

(CHOLINESTERASE)

14-57-7-15092
Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 146 (USSR)

AUTHOR: Izmaylov, I. V.

TITLE: Faunal Association in the Artificial Forests of the
Khoper Preserve (Nekotoryye zakonomernosti formirovaniya fauny iskusstvennykh lesnykh nasazhdeniy v rayone Khoperskogo zapovednika)

PERIODICAL: Tr. Khopersk. gos. zapovednika, 1956, Nr 2, pp 123-130

ABSTRACT: Few species of birds inhabit pine stands one to three years old, and these species are of the open-space type. When the stands grow older, "forest" birds begin to settle in them, while their rodent population decreases. After the nesting season the bird population becomes more varied because of the immigration of species from natural forests. The author

Card 1/2

IZMAYLOV, I.V.

"Bibliography of Irkutsk Province"; biology. Reviewed by I.V. Izmailov.
Kraevd. sbor. no.2:171-172 '58. (MIRA 13:2)
(Irkutsk Province--Biology--Bibliography)
(Bibliography--Irkutsk Province--Biology)

IZMAYLOV, I.V.; KHANKHASAYEV, V.K.

Birds of the Maya Valley. Kraevd.sbor. no.4:112-128
'59. (MIRA 13:7)
(Maya Valley--Birds)

IZMAYLOV, I.V.; PROKOP'YEV, M.A.

Distribution of siskins (*Carduelis spinus*) in Buryat-Mongolia. Kraeved.sbor. no.4:136-138 '59.
(MIRA 13:7)

(Buryat-Mongolia--Finches)

IZMAYLOV, I.V.; STARKOV, I.A.

Zoological research in the southern part of the Vitim Plateau
in 1960. Kraeved. sbor. no.6:70-93 '61. (MIRA 15:2)
(Vitim Plateau--Zoology)

BUYANTYYEV, B.R., red.; IZMAYLOV, I.V., red.; NAGORNOVA, A.Ya., red.;
RADNAYEV, A.N., tekhn. red.

[Problems in the protection of nature in the Buryat A.S.S.R.]
Voprosy okhrany prirody Buriatii; materialy. Ulan-Ude, Buriat-
skoe knizhnoe izd-vo, 1962. 125 p. (MIRA 16:2)

1. Buryatskaya konferentsiya po okhrane prirody, 1st, Ulan-Ude, 1961.
2. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut Severo-Osetinskoy Akademii nauk SSSR (for Buyantyyev).
3. Buryatskiy pedagogicheskiy institut im. D.Banzarova (for Izmaylov).

(Buryat-Mongolia--Natural resources)

100-100000

Some problems of conservation in Goryatia. (Abstr. print. lib.
1 Bull. Vost. no. 171-76 '62. (MIRA 1975)

ACCESSION NR: AT4043276

S/2744/64/000/007/0101/0108

AUTHOR: Lapitskaya, O. I., Sady*kov, R. Kh., Izmaylov, I. Yo.

TITLE: Investigation of the electropyrolysis of liquid hydrocarbons for the production of acetylene

SOURCE: Ufa. Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke nefli. Trudy*, no. 7, 1964. Sernisty*yo nefli i produkty* ikh pererabotki (Sour crude oil and products of refining), 101-108

TOPIC TAGS: hydrocarbon, acetylene, electropyrolysis, Diesel fuel, acetylene production, hydrocarbon pyrolysis

ABSTRACT: A laboratory apparatus for producing acetylene by electropyrolysis of liquid hydrocarbons is described (see Fig. 1 in the Enclosure) and the most successful construction of the reactor is schematically illustrated (see Fig. 2). The influence of the dimensions and weight of the movable contacts as well as of the distance between the stationary electrodes is investigated. The yield in the reactor increased and the consumption of electricity per 1 m³ gas decreased with increasing dimensions of the movable contacts. With increasing weight of the movable contacts, the electric consumption per 1 m³ acetylene increased and the gas yield increased proportionally to the load; the composition of the

Card 1/4

ACCESSION NR: AT4043276

ENCLOSURE: 01

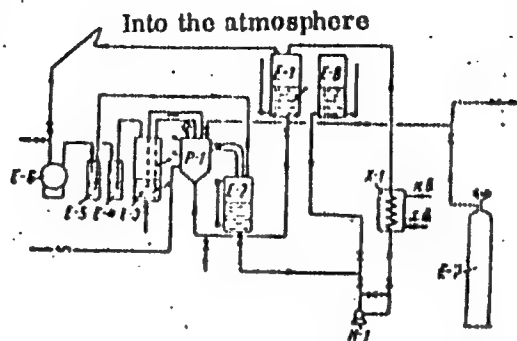


Fig. 1 - Technological diagram of the laboratory installation. P-1 - reactor (see Fig. 2); E-1 & E-2 - intermediate tanks; E-3, E-4 & E-5 - bubblers; E-6 - gas meter; E-7 tank with inert gas; E-8 - raw material tank; X-1 - immersible refrigerator; H-1 - gear pump

Card 3/4

LAPITSKAYA, O.I.; SADYKOV, R.Kh.; IZMAILOV, I.Ye.

Investigating the electropyrolysis of liquid hydrocarbons with
a view to obtaining acetylene. Trudy BashNII NP no.7#101-108 '64.
(MIRA 17:9)

25(1,7)

SOV/117-59-3-18/37

AUTHOR: Izmaylov, K.F., Engineer

TITLE: Machining Curving Surfaces Without a Tracer (Obra-
botka krivolineynykh poverkhnostey bez kopira)

PERIODICAL: Mashinostroitel', 1959, Nr 3, pp 28 - 29 (USSR)

ABSTRACT: The Nauchno-issledovatel'skiy institut poligraficheskogo mashinostroyeniya, NIIPoligrafmash, (Scientific Research Institute of Polygraphic Machine Construction) needed a high-precision cylindrical cam (template) with a varying-lead spiral groove (Figure 1) beginning with 11.52 mm lead and ending with 162 mm over a length of 496 mm and making 9-1/16 turns. The complex problem was met by the formula

$$s = 144 \frac{\alpha}{4500 - \alpha}$$

Card 1/3 where s is the axial feed of the cutting tool, and

SOV/117-59-3-18/37

Machining Curving Surfaces Without a Tracer

the same method as the cutting, with the end mill replaced by an "arbor" with a "floating" bushing. Machining of the groove by one operator took 24 hours for the rough milling, 34 hours for the finish milling, and 12 hours for the checking. The described cutting method is recommended as more commercial than the conventional method with the use of tracers in the case of single-piece and small-range production, and permits the cutting of practically any curved grooves with available machine tools, and without complex auxiliary fixtures and marking. There are two diagrams and 1 photograph.

Card 3/3

LATKO, T.D.; MATAYEV, G.A.; IZMAYLOV, L.B.

Geological structures in connection with the tapping of fractured
carbonate layers and the completion of wells. Geol. nefti i gaza
4 no.5:42-45 My '60. (MIRA 13:9)

1. Dagestanskiy sovnarkhoz.
(Petroleum geology)

IZMAYLOV, L.B.

Determination of external loads acting on casing columns. Trudy
GrozNII no.10:12-20 '61. (MIPA 15:2)
(Oil well casing) (Rock pressure)

IZMAYLOV, L.B.

Calculating casings for collapse resistance. Izv. vyzn, ucheb.
zav.; neft' i gaz 5 no.6:41-46 '62. (MIRA 16:5)

1. Groznenskiy neftyanoy institut.
(Oil well casing)

IZMAYLOV, L.B.

Effect of temperature changes occurring in a well on the
external pressure on a casing string. Neft. khoz. 43
no.8:43-46 Ag '65. (MIRA 18:14)

LATKO, T.D.; IZMAYLOV, L.G.; MATAYEV, G.A.

Causes of casing breakdown and collapse. Neftianik 6 no.3:12-13
Mr '61. (MIRA 14:10)

1. Sotrudniki TSentral'noy nauchno-issledovatel'skoy laboratorii.
(Oil well casing)

IZMAYLOV, M.

Give more attention to the problems of wage control. Den. 1
kred. 21 no.11:50-55 N '63. (MIRA 17:2)

1. Nachal'nik planovo-ekonomicheskogo otdela Alma-Atinskoy
oblastnoy kontory Gosbanka.

IZMAYLOV, M.Z. [deceased]; SHOSTENKO, Yu.V.; CHMIL', V.D.

Use of polymeric materials in partition chromatography with
inverted phases. Dop. AN URSR no.2:201-205 '62. (MIRA 15:2)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevti-
cheskiy institut. 2. Chlen-korrespondent AN USSR (for Izmaylov).
(Chromatographic analysis)(Polymers)

IMMEDIATE,

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Mineralogical and
Geological Chemistry

(2)
"Asbestos in the serpentine zone of Kizarsko-Gradovici
in the Rulstu-Cabar-Zabari area." I. C. Imaslov. *Glasnik
Prirod. Muzeja Srbije* (Bull. Museum Hist. nat.
pays Serbes), Sér. A, Mineralog., géol., paléontol., No. 3,
103-10(1032)(in French).—Asbestos of high quality occurs
as fissure-filling veins in serpentine. It is genetically re-
lated to the intrusion of saubdlin-bearing trachytes.

Michael Fletcher

IZMAYLOV, N. A.

Nikolay Ivanovich

(DECEASED)

1963/4

~~ca 1962~~

(1907-1961)

CHEMISTRY

(Ukrainian)

~~see HC~~

GAVRISH, A.E.; IZMAYTOV, N.A., prof., rukovoditel' raboty

Constants of dissociation of some xanthic acids in aqueous
solutions. Ukr. khim.zhur. 29 no.9:900-904 '63. (MIRA 17:4)

1. Khar'kovskiy gornyy institut.

IGNATOV, I.S.; IGNATOV, N.A. [deceased]

Exchange of ions of different valency in nonequivalent solvents.
Zhur.fiz.khim. 39 no.10:2485-2485 O '65.

(MIRA 18:12)

1. Khar'kovskiy khimiko-farmatsevticheskiy institut i Khar'-
kovskiy gosudarstvennyy universitet imeni Gor'kogo. Submitted
July 20, 1964.

IZMAYLOV, N.A. [deceased], GIBBYLY, V.I., P. 144, 145. (ELECTROLYTE)

Thermodynamic properties of nonaqueous electrolyte solutions.
Part 14. Zhur. fiz. khim. 37 no.4:822-828, 1961. (MIRA 17:7)

1. Khar'kovskiy gosudarstvennyy universitet.

TIMOFEYEV, V. N.; PALTUSOVA, K. I.; IZMAYLOV, O. A.; SHKLYAR, F. R.

Investigating the aerodynamics of a smoke flue in blast
furnace air preheaters. Sbor. nauch. trud. VNIIMT no.8:360-372
'62. (MIRA 16:1)

(Blast furnaces) (Flues--Aerodynamics)

6 (7)

SOV/211-59-10-15/23

AUTHOR: Izmaylov, P.A., Chief, and Pilyus, G.S., Senior Engineer

TITLE: Experience in Automation of Intra-rayon Telephone Communications

PERIODICAL: Vestnik svyazi, 1959, Nr 10, pp 24-26 (USSR)

ABSTRACT: This article is concerned with automation of intra-rayon telephone communications (VRS) facilities in the Moscow oblast'. By way of introduction the authors state that in 1956 telephonization of all sovkhoses, Machine-tractor stations, sel'skiye soveti (rural councils) and kolkhoz offices was completed. They then review recent achievements in automation of VRS facilities: 101 VRS automatic telephone stations (ATS) and 51 UPTSs were put in operation by the end of 1958, as a result of which more than 57% of VRS stations were operating around the clock at the beginning of this year; at present VRS communications is fully automatic in 5 rayons: the Bronnitsy, Klin, Lotoshino, Ozery and Chekhov rayons; the level of VRS automation is high in the Dmitrov, Yegor'yevsk, Naro-Fominsk, Podolsk, Orekhovo-Zuyevo and Stupino rayons. It is planned to

Card 1/4

507/111-59-10-15/23

Experience in Automation of Intra-rayon Telephone Communications

replace all manual stations with automatic ones by the end of 1961. The economic advantages of this automation work are also cited. The balance of the article is devoted to the organization of work in automation of VRS facilities. Installation is done on the basis of a yearly plan drawn up by the direktsiya radiotranslyatsionnoy seti (Board of the Radio Broadcasting Relay Network) and approved by the heads of the communications administrations. The processes of planning, projecting, preparation and installation are outlined; standard designs, developed by the "Giprosvyaz" Institute, in somewhat modified form, are used. Before 1958 equipment assembly work in the VRS ATSS was done by the remontnaya-montazhnaya kontora (Maintenance and Assembly Office) of the communications administration; in 1958 this work was transferred to the SMUR; at present installation of VRS ATS equipment is done by workers of the SMUR and the rayon communications offices. The authors note the shortage of connecting circuits and the need for large scale output of multiplexing apparatus for steel connecting circuits

Card 2/4

SOV/111-59-10-15/23

Experience in Automation of Intra-rayon Telephone Communications

and B.A. Shcherbakov, technicians at the Voskresensk and Ruza rayon communications offices respectively. The author mentions courses for preparation and re-training of VRS technician by the communications administration and DRTS; 4 VRS ATS technicians are named: L.V. Golomazov (photo), N.I. Turkin, I.I. Ivanov, V.I. Morozov, of the Podol'sk, Voskresensk, Dmitrov and Yegor'yevsk communications offices. Service, maintenance and checking of automatic stations is discussed and outlined. The authors conclude with mention of a number of things which are holding up further and faster development of the VRS system; in particular he notes the need for serial production of block stations with up to 40 numbers capacity, necessary for the VRS network; a system for automation of battery charging and stabilization of the line voltage used for this purpose is also lacking. They also mention defective equipment manufactured for VRS ATSs, specifically the rotary switches in the charge-discharge panels supplied with UATS-50/100 equipment.

Card 4/4

ASSOCIATION: DRTS Moskovskoy oblasti (Moscow Oblast DRTS)

1 L MAY 1954
BUIANOV, A.I.; IZMAYLOV, P.I.; PETROV, N.A.; TROITSKIY, B.V.; SLOBODCHIKOV,
D.A., redaktor; LEVCHUK, G.P., redaktor; INOZEMTSEVA, A.I., redaktor;
KUZ'MIN, G.M., tekhnicheskij redaktor.

[Topography] Topografiia, Pod obshchei red. D.A.Slobodshikova.
Moskva, Izd-vo geodesicheskoi lit-ry. Pt. 1. 1954. 539 p. [Microfilm]
(Topographical surveying) (MLRA 7:11)

IZMAYLOV, R.; ZAMYATIN, V.

Record soaring glider. Kryl.rod. 11 no.10:14-17 0 '60.

(MIRA 13:11)

(Gliders (Aeronautics))

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5"

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5"

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5"

Levy, R.L.

USSR/Physical Chemistry - Kinetics, Combustion
Explosives, Topochemistry, Catalysis

B-9

Abs Jour : Referat Khim - Khimiya, No 2, 1957, 3867

Author : Rydus Ya.T., Imaylov R.L.
Inst : Department of Chemical Sciences, Academy of Sciences USSR
Title : Catalytic Hydro-Condensation of Carbon Monoxide with Olefins. Communication 14. Mutual Transformation of Butene-1 and Butene-2 Under Conditions of Catalytic Hydro-Condensation of Carbon Monoxide with Olefins. Communication 15. Hydro-Condensation of Carbon Monoxide with Butene-2.

Orig Pub : Izv. AN SSSR, Otd. Khim. na, 1956, No 4, 467-474, 475-481

Abstract : 14. Investigation of the reaction of isomerization of butene-1 (I) to butene-2 (II) and of II to I, at 190° and space velocity 66-100 hour⁻¹, over catalysts of the reaction of hydro-condensation of CO with olefins. It is shown that in the absence of H₂ the reactions I → II and

Card 1/3

- 154 -

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5"

ROBINZON, Y. A.; GRISHINA, O. N.; MUKHAMEDOVA, L. A.; URMANCHIEV, F. A.;
IZMAYLOV, R. I.; BONCHER, L. Y. G.; KASHAYEV, S. Kh. G.; A'LIKHANOVA,
N. G.; GONIK, V. K.; BAYBUROVA, M. Kh.; NECHAYEVA, M. A.

Petroleum of the Tatar A.S.S.R. Izv. Kazan. fil. AN SSSR. Ser. khim.
nauk no. 4: 93-113 '57. (MIRA 12:5)
(Tatar A.S.S.R. -- Petroleum)

Reaction of Isomerization in a Series of Butenes

Table 1 gives data on content in % of butene-2 (cis- and trans-form) in an equilibrium mixture of n-butenes (t° from 200-500 $^{\circ}$). Table 2 presents data on the content of n-butenes in an equilibrium mixture (t° from 27-727 $^{\circ}$), wherein a comparison is made of the composition of equilibrium mixtures of n-butenes computed by A. V. Frost (8) with corresponding data obtained experimentally by other authors (H. H. Voge, N. C. May [4]). Table 3 gives data on the free energies and equilibrium constants of the isomerization of butenes (in an ideal gaseous state) (t° from 25 to 1227 $^{\circ}$ C.). Table 4 presents values of equilibrium concentrations of butenes (in an ideal gaseous state, t° from 25-1227 $^{\circ}$ C. for butene-1, butene-2, butene-2 [trans], and isobutene). Table 5: content of butene-1 and butene-2 in a mixture in dependence on volumetric velocity (velocity space).

The outstanding personalities cited in text are: F. E. Frey and W. F. Huppke, for their study on the dehydrogenization of n-butane at t° of 350-500 $^{\circ}$ under conditions of the absence of isobutene in the

Card 3/4

IZMAYLOV, R.I.; OKRUZHNOV, A.M.; FEDOROV, G.I.; VIROBYANTS, R.A.

Thermocatalytic conversions of hydrocarbons of a petroleum
C6-fraction on Al_2O_3 -Pt catalyst. Neftekhimiya 1 no.4:505-
508 J1-Ag '61. (MIRA 16:11)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

LE, B.; IZMAYLOV, R.I.; URMANCHEYEV, F.A.; LIPATOVA, I.P.; KHASHAYEV,
S.-Kh.G.; LAMANOVA, I.A.; BUKHARAYEVA, R.G.

Individual hydrocarbon composition of the petroleum of Tataria.
Report No.5: Ligroine from the petroleum of the Bavly Oil Field.
Izv. AN SSSR. Otd.khim.nauk no.7:1310-1315 J1 '61. (MIRA 14:7)

1. Khimicheskiy institut im. A.Ye. Arbuzova Kazanskogo filiala
AN SSSR.

(Bavly region--Petroleum) (Ligroine)

IZMAYLOV, R.I.; OKRUZHNOV, A.M.; VIROBYANTS, R.A.

Volga crudes as a raw material for the production of benzene by catalytic reforming. Khim.i tkeh.topl. i masel 7 no.11:29-32 N '62. (MIRA 15:12)

1. Institut organicheskoy khimii AN SSSR, g. Kazan'.
(Petroleum—Refining) (Benzene)

AKHARNOI, A.M.: (MAGI), R.I.; VIKHARNOI, A.M.

high polyaddition of toluene and ethylene oxide containing
nickel. Neftokhimiya 4 no.5.676-79. SSSR, U.S.S.R.

(MIRA 1972)

1. Institut khimicheskoy khimii AN SSSR, Moscow.

IZMAYLOV, S.S.

Kolkhoz Barabinskoi nizmennost [Barabinsk lowlands collectiv. farm] 7.
Moskva, Sel'khozgiz, 1954. 143 p.

SC: Monthly List of Russian Accessions, Vol. 7 No. 2 May 1954.

The theory of topochemical reactions. S. V. Izmailov
 Phys. Z. *Soviet Union* 4, 415 (1961) (English)
 The reaction velocity in the case of decomposition of a single
 crystal is initially proportional to the 3rd power of the
 time if it is assumed that the reaction centers appear con-
 tinuously during the reaction period. The log of the
 time interval in which the reaction velocity reaches its
 max. equals $(2R + E) / RT$, R is const. in which E is
 the crit. increment of the velocity at which the interface
 is advancing. Louis Goldmar

ADU 35.4 METALLURGICAL LITERATURE CLASSIFICATION

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410005-5"

USSR/Nuclear Physics - Mesons
Nuclear Physics - Particles

Nov 1947

The Spectrum of Meson Masses, S. V. Izmailov, ~~Leningrad~~
USSR State Pedagogical Institute ~~Imeni Gorkogo~~, 4 pp

"Dokl Ak Nauk" Vol LVIII, No 6

Author makes a simple suggestion that the inner cir-
culation is connected with the emission of "inner circula-
tion" particles (not connected with the kinematic spin
which is determined by the character of a complete
equation of movement M_k with an expense established by
equation of movement M_k with an expense established by
 $M (M_1 = M_2, \dots)$ and time $M (M_1 = M_2, \dots)$ which is
36769

Nov 1947

USSR/Nuclear Physics - Mesons (Contd) Sub-

established by the general rules of commutation. Sub-
mitted by A. F. Ioffe 4 Jun 1947.

IZMAILOV, S. V.

36769

USSR/Nuclear Physics - Meson Spin

11 Sep 49

"Probability of Meson Conversion," A. A. Ginzburg,
S. V. Izmaylov, Leningrad Physicotech. Acad
Sci USSR, Pedagogical Inst ment A. I. Gertsen,
3 pp

"Dok Ak Nauk SSSR" Vol LXVIII, No 2

Primary particle and one of the secondary particles have same spin and are described by wave equations of same type (with different masses and, generally speaking, charges). These two particles are considered as two states of the same particle. Third particle, generated in transition from first to second and having an integral spin, is treated as a quantum wave field. Derives concrete formulas for disintegration of a meson with spin $\frac{1}{2}$ into particles with spin $\frac{1}{2}$ and 0, and of a meson with spin 1 into a meson with spin 0 and a neutrino or photon with the aid of Kemmer's matrices. Submitted by Acad A. F. Ioffe 4 Jul 49.

3/50775

PA 165T113

IZMAYLOV, S. V.

USSR/Physics - Static, Radio
Electrons

Aug 50

"Possibility of Extracting Electrons From Metals
by Molecules of a Neutral Gas With Electronegative
Properties," S. V. Izmaylov, A. M. Furman, Gen Lab
in Struggle Against Industrial Radio Interference,
Min of Elec Ind USSR

"Zhur Eksper i Teoret Fiz" Vol XX, No 8, pp 729-733

Shows nonexcited subject molecules can extract elec-
trons from a metal. Calculates number of electrons
extracted by one molecule incident normally upon
metal's surface with velocity V as function of mole-
cule's polarizability α and minimum distance
 x_0 from surface characterizing repulsive force.
Submitted 27 Jan 50.

165T113

IZMAYLOV, S.V.

Electromagnetic interaction of particles. Uch.zap.Ped.inst. Gerts.
103:219-259 '55. (MLBA 10:3)
(Quantum thoery)

Category : USSR/General Problems - Problems of Teaching

1-3

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 5521

Author : Izmaylov, S.V.

Title : Concerning the Professional-Pedagogical Trends in the Course
on Theoretical Physics in Pedagogical Institutes.

Orig Pub : Uch. zap. Leningr. gos. ped. in-t, 1956, 124, 111-130

Abstract : No abstract

I

20-2-12/60

AUTHORS: Fradkin, E. Ye. , Izmaylov, S. V.

TITLE: On the Permissible Transformations of the Equations for Particles With Higher Spins (O dopustimyykh preobrazovaniyakh uravneniy dlya chastits s vysshimi spinami)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 2, pp.277-280 (USSR)

ABSTRACT: The particles with any spins are described by equations of the type $(L^i(\partial/\partial x_i) + i\kappa) \psi(x_0, x_1, x_2, x_3) = 0$. In this connection $\psi(x_0, x_1, x_2, x_3) = \psi(ct, x, y, z)$ signifies the wave function which is transformed according to a finitely-dimensional representation of the complete Lorentz group; $L^i (i = 0, 1, 2, 3)$ - quadratic matrices, κ - a real constant different from zero. The invariance of the above-mentioned equation with regard to the just mentioned transformation is guaranteed by the following additional conditions for the matrices L^i :

Card 1/3

20-2-12/60

On the Permissible Transformations of the Equations for Particles With Higher Spins

V is also given. For the particles with higher half-integer spins $s = n + (1/2)$ ($n = 1, 2, \dots, \infty$) only the density of charge of the free particle at rest is an invariant of the permissible transformations. Finally these transformations are more closely investigated for a particle with spin $3/2$. The essential feature of these transformations lies in change of the metrics in the "additional" space with the spin $1/2$. There are 5 references, 1 of which is Soviet.

ASSOCIATION: Leningrad State Pedagogical Institute imeni A. I. Gertsen
(Leningradskiy gosudarstvennyy pedagogicheskiy institut im.
A. I. Gertsena)

PRESENTED: December 29, 1956, by V. A. Fok, Academician

SUBMITTED: December 21, 1956

AVAILABLE: Library of Congress

Card 3/3

On the Theory of Ion-Electron Emission From Metals.
I, Comparison With Experiment

SOV/57-26-10-17/40

for the linear section. It was clear in all quarters that a dependence of the coefficient γ_k of kinetic ion-electron emission upon the work function ϕ must exist. No success was, however, achieved in proving such a dependence experimentally. It is demonstrated in this paper - formula (1,05) - that in the linear section the secondary emission is not only a function of the work function, but also of the chemical potential μ of the electrons in the metal. The chemical potential remains constant, if the work function varies because of a modification of the absorption layer and thus the variation of γ_k is only determined by the variation of the function $F_0(x)$. $x^2 = 1 + \frac{\phi}{\mu}$. $F_0(x)$

drops rapidly with the increase of ϕ . The metals can be classified as follows with respect to the reduction of γ_k : Li, Na, K, Ni, Mo, Al, Ta, W, Cu, Pt, and thus with respect to the increase of the work function: K, Li, Na, Ta, Mo, Al, W, Ni, Cu, Pt. These two series on the whole do not agree with each other. This offers an explanation for the fact

Card 2/4

On the Theory of Ion-Electron Emission From Metals.
I. Comparison With Experiment

SOV/57-20-10-17/40

Card 4/4

59

S/044/60/000/007/048/058
C111/C222

AUTHOR: Izmaylov, S.V.

TITLE: On the question of the foundation of the special theory of relativity

PERIODICAL: Referativnyy zhurnal. Matematika, no.7, 1960, 213.
Abstract no.8252. Uch.zap.Leningr.gos.ped.in-ta, im.A.I.
Gertsena, 1958, 141, 19-26

TEXT: In the paper the author tries to give a "dynamic" foundation of the special theory of relativity on the base of the general laws of the point dynamics, the law of the proportionality of mass and energy, the principle of relativity, and the principle of the homogeneity of the space. 1/

[Abstractor's note: The above text is a full translation of the original Soviet abstract.]

Card 1/1

SOV/137-58-12-25039

Translation from: Referativnyy zhurnal Metallurgiya, 1958, Nr 12, p 145 (USSR)

AUTHOR: Izmaylov, S. V.

TITLE: Ion-electron Kinetic Emission of Metals (Iono-elektronnaya kineticheskaya emissiya iz metallov)

PERIODICAL: Uch. zap. Leningr. gos. ped. in-ta im A I Gertsena, 1958, Vol 166, pp 309-346

ABSTRACT: The author examines the secondary kinetic ion-electronic emission, i.e., emission of electrons (E) of a metal when its surface is struck by ions possessing great kinetic energy. A short review of the results of experimental investigation of this emission and a review of theories advanced earlier are adduced. A detailed examination is made of the mechanism set forth by the author which consists in the excitation of E conductivity by the electromagnetic inhibiting field of the ions falling on the metal. The calculation is performed with the aid of a model of free E for the energies of ϵ_i ions, which are appreciably greater than the energy of E removal, ϵ_e , it being assumed that the ions fall on the surface of the metal perpendicularly. It is shown that the emission coefficient γ in a broad range of energies $\epsilon_e \ll \epsilon_i \ll \epsilon_e M_i/m$, where M_i is the

Card 1/2

SOV/137-58-12-25039

Ion-electron Kinetic Emission of Metals

mass of the ion and m , the mass of the E , is proportional to the energy of the falling ion and inversely proportional to M_1 . When $v_1 \gg v_e M_1/m$, γ loses its dependence on v_1 . In qualitative agreement with the experiment it is found that the distribution of the normal components of the impulse of secondary E has a maximum, the position of which is displaced towards greater energies with an increase in the work function Φ . It is shown that the γ value is greatly dependent on the Φ/μ ratio, where μ is the chemical potential of the E corresponding to the observed strong variation of γ during the formation of adsorption layers Bibliography: 25 references.

M. K.

Card 2/2

Classical, Relativistic, and Quantum Mechanics

SOV/3813

TABLE OF CONTENTS:

Introduction

3

Laws of Motion of Macroparticles
(Classical Mechanics)

1. Frame of reference and velocity

4

2. Impulse and energy

6

3. Laws of motion

7

4. Principle of relativity. Space and time in classical mechanics

11

Laws of Motion of an Electromagnetic Field

13

5. The electromagnetic field

15

6. Basic properties of the field

Electromagnetic waves

7. Energy and impulse of the electromagnetic wave. Law of proportionality of mass and energy

16

Card 2/4

Classical, Relativistic, and Quantum Mechanics

80V/3813

19. Transmission of particles through the potential barrier.
Theory of radioactive α -decay
20. Theory of antiparticles

42

46

AVAILABLE: Library of Congress (QC131.I9)

Card 4/4

JA/cdw/mns
7-21-60

66334

SOV/181-1-10-9/21

~~24(3)~~ 24.6510

AUTHOR: Immaylov, S. V.

TITLE: The Theory of the Kinetic Ion - Electron Emission From Metals. II

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 10, pp 1546 - 1556 (USSR)

ABSTRACT: The mechanism of the electron emission (ion - electron emission) caused by the impact of a positive ion upon a metal surface depends on the ratio between the work function ϕ of the electron leaving the metal and the neutralization energy of the ion W_i in different ways according to whether $W_i \geq 2\phi$ or $W_i < 2\phi$. In the former case the mechanism resembles the Auger effect, and in the latter the electron is separated at the expense of the kinetic energy of the ion. At sufficiently high ion energies, this "kinetic" electron emission is independent of W_i/ϕ and the sign of the ion charge. The present paper deals with the theory of secondary kinetic ion-electron emission. In the introduction, the re-

Card 1/4

66334

SOV/181-1-10-9/21

The Theory of the Kinetic Ion - Electron Emission From Metals. II

sults obtained by several experimental investigations dealing with this subject are discussed (Yeremeyev et al, Arifov, Ayukhanov, Starodubtsev, Dunayev, and Fluka). The results of these investigations are given systematically in form of rules. A) Rules concerning the coefficient χ of secondary kinetic ion-electron emission (χ denotes the average number of electrons, the emission of which is induced by one ion). Here, six rules are found to apply, among others that in pure metals χ is very small ($\chi \ll 0.01$ with $E_{ion} \sim 500$ ev), but that it increases quickly in the presence of absorbing layers. Within a large energy interval, χ is a linear function of the energy E_i of the primary ion beam both in pure metals and in such containing absorbing layers. χ is further practically independent of the metal temperature, and it decreases with an increase in the mass of the bombarding ions. B) The rules of secondary ion-ion-emission. Here five characteristic interrelations are enumerated. In the following, the author discusses the results of some theoretical papers dealing with this subject (Kapitza, Morgulis, Gurtovoy, Frenkel',

Card 2/4

4

66335

SOV/181-1-10-10/21

~~24(3)~~ 24.6510

AUTHOR: Izmaylov, S. V.

TITLE: The Theory of the Secondary Electron Emission From Metals
Under the Influence of Fast Neutral Atoms. III

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 10, pp 1557-1561 (USSR)

ABSTRACT: In an earlier paper the author, together with Furman, developed a theory of the field induced electron emission from metals by neutral molecules with electronegative properties. In the present paper the theory of the kinetic electron emission from metals induced by neutral atoms is investigated. It has been shown experimentally that the coefficient of kinetic atom-induced electron emission χ_a (equal to the number of electrons emitted per incident atom of the energy E_a) is of the same order of magnitude as the coefficient of the kinetic ion-induced electron emission (Ref 2). The mechanism of the kinetic atom-induced electron emission is assumed to be similar to that of the kinetic ion-induced emission (Ref 3): The fast atom is partly slowed down in a collision with a surface target atom; first, the electron

Card 1/3

The Theory of the Secondary Electron Emission From
Metals Under the Influence of Fast Neutral Atoms. III

66335

SOV/181-1-10-10/21

$$P_a(k) = \frac{8}{(2\pi)^4} \frac{Z_{eff}^2 e^4}{\hbar^2} (1+b)^2 v^2 \int_{(k_0)} \frac{q_z^2 (1-\cos \omega t)}{\omega^4 q^4} (d\vec{k}_0). \text{ In}$$

the following the two limits $\tau \gg \hbar/\phi$ and $\tau \ll \hbar/\phi$ are investigated and formulas are given for γ_a and $P_a(k)$. In both cases γ_a is proportional to v^2 , i.e. it is proportional to the kinetic energy of the incident atom. Finally, the author gives an evaluation of τ . He obtains:

$$\tau \sim 2 \sqrt{\frac{A_1 \beta_0}{Z_{eff}^2}} \cdot 10^{-15} \text{ sec; } (\beta_0 \text{ is of the order of unity}). \text{ There}$$

are 3 Soviet references.

ASSOCIATION:

Gosudarstvennyy pedagogicheskiy institut im. A. I. Gertsena, Leningrad (State Pedagogical Institute imeni A. I. Gertsen, Leningrad)

SUBMITTED:

September 26, 1957

Card 3/3

4

IZMAYLOV, S.V.; P'YANOV, I.I.

Production of tritium in the bombardment of heavy nuclei by fast protons. Zhur.eksp.i teor.fiz. 41 no.1:118-126 J1 '61. (MIRA 14:7)

1. Radiyevyy institut AN SSSR.

(Collisions (Nuclear physics)) (Tritium) (Protons)

IZMAYLOV, Sergey Valentinovich; SVITKOV, L.P., red.; KOZLOVSKAYA,
M.D., tekhn. red.

[A course in electrodynamics for physics and mathematics
faculties of pedagogical institutes] Kurs elektrodinamiki dlia
fiziko-matematicheskikh fakul'tetov pedagogicheskikh institu-
tov. Moskva, Uchpedgiz, 1962. 439 p. (MIRA 15:10)
(Electrodynamics)

Theory of secondary electron emission

5/101/02/004/009/029/045
B104/B105

to the amount of energy lost by the primary beam in the material per unit of path, and

$$kJ(z)G(\delta, z), G(\delta, z) = -\frac{d\delta}{dz} \quad (3)$$

where k is the factor of proportionality that depends on the type of emitter. (4) The secondary electrons have a relatively low energy and are absorbed according to the law $J_s(l) = J_0 \exp(-\beta l)$, where l is the distance from the point of secondary electron production. The total flux of secondary electrons is obtained as $J_s = \delta J_1 = (\delta_0 + \delta_1)J_p$, where

$$dJ_0 = kJ_p G(z) dz e^{\int_{z_0}^z \delta_0 dz} \int_0^{\pi/2} \frac{1}{2} e^{-\frac{\beta z}{\cos \varphi}} f(-\cos \varphi) \sin \varphi d\varphi \quad (37)$$

is the number of slow secondaries produced by the primary beam, and

Card 2/5

Theory of secondary electron emission

5/151/62/004/009/029/045
B104/B186

is that of the secondary produced by reflection of the primary beam.
It is shown that f depends essentially on u and r . η is obtained as

$$\eta = f(\delta_p) \left(1 - e^{-(U+W_a)^{s-r} - (\delta_p+W_a)^{s-r}} \right). \quad (24)$$

$$f(\delta_p) = \left[1 - \frac{1}{2^{s-r}} \left[1 + \left(\frac{U+W_a}{\delta_p+W_a} \right)^s \right]^{\frac{s-r}{s}} \right] \left[1 - \left(\frac{U+W_a}{\delta_p+W_a} \right)^{s-r} \right]^{-1}. \quad (25).$$

Here $u(U+W_a)$ is the reflexion factor, and $Z_m(U+W_a)$ is the penetration depth of primary electrons with the energy $\mathcal{E}_p = U$. There are 6 figures.

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut
im. A. I. Gertsena
(Leningrad State Pedagogical Institute imeni A. I. Gertsen).

Card 4, 5

S/077/62/007/006/001/002
D036/D114

AUTHOR: Izmaylov, S.V.

TITLE: A contribution to the theory of the sensitivity of ionographic emulsions. I. The case of a single digestion nucleus on the grain

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 7, no. 6, 1962, 433-443

TEXT: The author expounds a theory of the sensitivity of ionographic emulsions, based on the probability of distribution of digestion nuclei in each individual grain of the emulsion. Formulae are derived for the mean grain sensitivity for the cases of relatively high and relatively low energy losses by the ionizing particles. The sensitizing action of triethanolamine is ascribed to the fact that it increases the mean number of Ag atoms in the digestion nucleus. Experimental values agreed well with those obtained with the aid of the theory. There are 5 tables. ✓

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut im. A.I. Gertsena (Leningrad State Pedagogical Institute im.A.I.Gertsen)

SUBMITTED: July 11, 1961
Card 1/1

muon, positron, antineutrino

ABSTRACT: A general formula is derived for the energy and angle distributions of
muon, positron, antineutrino, and high energy antineutrino of the type

1 2174-05

ACCESSION NR: 7P002251

... of ... differs somewhat from those by others in that an effort ... of the ... and ...

ASSOCIATION: Leningradskiy gospedinstitut imeni A. I. Gertsena (Leningrad State
Biological Institute)

SUB CODE: 11

Card 2/2

L 6460-00 EWT(m) DIAAR

ACC NR: AP5025253

SOURCE CODE: UR/03/6/65/002/004/0164/0167

AUTHOR: Izmaylov, S. V.; Shul'man, G. A. 44,55ORG: Leningrad State Pedagogical Institute im. A. I. Gertseva (Leningradskiy gosudarstvennyy pedagogicheskiy institut) 44,55

TITLE: Filling of electron shells of compressed atoms in the statistical model

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pisma v redaktsiyu (Prilozheniye), v. 2, no. 4, 1965, 164-167

TOPIC TAGS: nuclear shell model, electron shell, pressure effect, quantum number

ABSTRACT: Starting from the simplified Sommerfeld condition the authors show that for a compressed atom the first appearance of s-, p-, d-, and f-electrons will be determined by the formula

$$Z_l = 1.26(1 - \gamma)(1 + \frac{1}{2})^3$$

where l is the quantum number, γ is a correction term, and Z is the atomic number of the element. The factor $(1 - \gamma)$ will decrease with increasing pressure, and consequently, the atomic number Z of the element in which the electrons with given quantum number l first appear will also decrease. It is easy to determine the factor $(1 - \gamma)$, meaning also the parameter A . It is also shown that formation of electronic groups in a compressed atom depends essentially on the pressure, that the number of the d- and f-electrons increases appreciably in atoms with increasing pressure, and that g-

Card 1/2

L 6466-66

ACC NR: AP5025253

9

electrons also appear; on the other hand, the number of s- and p-electrons increases very little. The first appearance of electrons with a given quantum number shifts towards the elements whose atomic numbers are smaller than atomic numbers corresponding to the periodic table. An analogous calculation was carried out for a compressed atom in the statistical model with account of quantum corrections that have the same order of magnitude. In the model with the corrections, the dependence of the energy of the atomic shell on the radius is such that one can speak of its finite dimensions in the absence of pressure. This makes it possible to determine for several elements the pressure at which the electrons with a given quantum number first appear. A table is presented, listing for several elements the calculated pressures in the Thomas-Fermi model and in the model with the quantum corrections. Authors are grateful to I. V. Shirmanova, V. T. Aleksandrov, and G. G. Gurbanov for programming and help in the calculations. Orig. art. has: 1 figure, 6 formulas, and 1 table.

SUB CODE: NP/ INUM DATE: 11Jun65/ ORIG REF: 002/ OTH REF: 003

dw

Card 2/2

J. 9647-66 EWT(1)/EWT(m)/I/EMP(+)/EMP(h)/ENA(m)-2 I.D.R.(n) J.D. 30/3/67
 ACC NR: AP5025379 SOURCE CODE: UR/0181/65/007/010/3008/3014
 AUTHOR: ^{44, 55} Izmaylov, S. V.; ^{44, 55} Rozman, G. A. 58
 ORG: ^{44, 55} Leningrad State Pedagogical Institute im. A. I. Gertsen (Leningradskiy gosudarstvennyy pedagogicheskii institut)
 TITLE: Elastic scattering of excitons and electrons by neutral pair vacancies in alkali halide crystals
 SOURCE: Fizika tverdogo tela, v. 7, no. 10, 1965, 3008-3014
 TOPIC TAGS: alkali halide, ^{21, 44, 55} electron scattering, crystal theory, ^{21, 44, 55} crystal lattice defect, crystal lattice vacancy
 ABSTRACT: The paper is a theoretical study of elastic scattering of relatively fast secondary electrons and non-polarized excitons by dipolons. Dipolons are defined as pair defects of three types: two oppositely charged vacancies at adjacent lattice sites; two oppositely charged interstitial ions separated by a distance of the order of a lattice constant; or a vacancy and a nearby oppositely charged interstitial ion. To make the problem specific, the case of two adjacent oppositely charged vacancies is considered. The results are true for the second case, and with some simplification for the third case also. Exciton and electron scattering are considered separately. Numerical calculations are made for scattering in NaCl and KCl crystals. Mean
 Card 1/2

L 9647-66

ACC NR: AP5025379

free paths are calculated and temperatures are determined below which dipolon-exciton scattering predominates over scattering by thermal lattice vibrations. The mean free path for KCl is $\approx 4 \cdot 10^{-4}$ cm, and the critical temperature for predominate dipolon scattering is $\approx 10^\circ\text{K}$. The corresponding values for sodium chloride are $\approx 5.5 \cdot 10^{-4}$ cm and very nearly 9°K . Formulas are derived for determining residual resistance due to electron-dipolon scattering. It is shown that perturbation theory may be used for the interaction potential. Orig. art. has: 1 figure, 41 formulas.

SUB CODE: 20/

SUBM. DATE: 08Jul64/

ORIG REF: 012/

OTH REF: 006

Card 2/2

L 7238-66 EWT(1)/EWT(m)/EWP(c)/EWP(b)/EWA(h) JD
ACC NR: AP5025905

SOURCE CODE: UR/0057/65/035/010/1889/1896

AUTHOR: Izmaylov, S.V.; Shul'man, G.A.
40, 55 49, 55

ORG: Leningrad State Pedagogical Institute im. A.I. Gertsen (Leningradskiy gosudarstvennyy pedagogicheskiy institut) 44, 55

TITLE: On the theory of the periodic system of the elements at high pressures. 1.

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 10, 1965, 1889-1896

TOPIC TAGS: atomic structure, high pressure, periodic system, Fermi statistical theory, theoretic physics

ABSTRACT: The influence of pressure on the electronic structure of atoms is discussed with the aid of the statistical atomic model. The atomic electrons are assumed to be confined by the pressure to the interior of a sphere of finite radius and to be distributed according to the Lenz-Jensen formula. The Lenz-Jensen distribution is employed because it approximates the Fermi-Thomas distribution and is more tractable. The relation between the pressure and the radius of the atom is obtained from the expression of the Fermi-Thomas model for the electron kinetic energy, and the free parameter in the Lenz-Jensen distribution is determined from the condition that the total energy (for fixed radius) be minimum. It is found that increase of pressure tends to cause electronic states of higher orbital angular momentum to become occu-

Card 1/2

UFG- 539.0

L 40900-00 INT(K)/INT(L)/INT(M)/INT(N)/INT(O)

ACC NR: AP6011382

SOURCE CODE: UR/0057/66/036/003/0405/0412 54

AUTHOR: Izmaylov, S.V.; Shulman, G.A. 50
B

ORG: Leningrad State Pedagogical Institute im. a.I.Gertsen (Leningradskiy gosudarstvennyy pedagogicheskiy institut)

TITLE: On the theory of the periodic system of the elements at high pressures. 2. 2 18

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 3, 1966, 405-412

TOPIC TAGS: periodic system, atomic structure, statistical theory, pressure effect

ABSTRACT: In an earlier paper (ZhTF, 35, 1889, 1965) the authors discussed the periodic system at high pressures on the basis of the Fermi-Thomas model and showed that the formation of electron shells in the atom, the first appearance of electrons with a given azimuthal quantum number, and the mean angular momentum of the electrons in the atom depend significantly on the pressure. In the present paper, which the authors characterize as "preliminary", those calculations are generalized, on the basis of the "generalized statistical model", to take into account the exchange and second order quantum corrections to the kinetic energy, as well as the correlation correction. The calculations were performed with the Lentz variational method as employed earlier by H.Jensen (Zs. Phys., 77, 722, 1932), with the expression $A \exp(-(\lambda r)^{1/\beta})$ for the electron density in the atom. Here A is a normalizing factor, λ is a variational

Card 1/3

UDC: 539.183.3

within the atom, particularly in view of the fact that the parameter β was not varied. The authors thank I.V.Shirmanova, V.T.Aleksandrov, and G.G.Gurbanov for programming

Card 2/3

I 04828-57 ENT(1) LJP(c)

ACC NR: AP6026969

SOURCE CODE: UA/0051/66/021/002/0178/0180

AUTHOR: Izmaylov, S. V.; Rozman, G. A.

ORG: none

TITLE: Formation of an H'-center

SOURCE: Optika i spektroskopiya, v. 21, no. 2, 1966, 178-180

TOPIC TAGS: crystal lattice vacancy, crystal lattice defect, color center, electron trapping

ABSTRACT: Calculations performed in the paper show that there is a definite probability of formation of a new center which is a complex defect called the H'-center and consists of the neutral pair vacancy+electron. The H'-center should be less stable than F- and F'-centers. Therefore, the H'-center should dissociate as a result of thermal fluctuation or light absorption. As in the crystal with F'-centers, an appreciable photoconductivity due to the dissociation of H'-centers should exist down to the lowest temperatures. The H'-center should be anisotropic, and data on it can be obtained by studying polarized luminescence. It is known that when a colored alkali halide crystal is illuminated with light corresponding to the F-band (or white light) at room temperature, its decolorization takes place, and new bands appear in place of the F-band. In the authors' view, H'-centers may be responsible for the appearance

Card 1/2

UDC: 548.0:620.192

IZMAYLOV, T.U.

BAZANOVA, N.U.; IZMAYLOV, T.U.

Mechanical receptors of the abomasum of calves. Vest. AN
Kazakh. SSR 11 no.9:98-101 8 '54. (MIRA 8:2)
(Receptors(Neurology))(Stomach)(Calves)

IZMAILOV, T.U.

Role of stomach mechanoreceptors in the secretory activity of the
abomasum in calves. Trudy Inst. eksp. biol. AN Kazakh. SSR 3:99-103
'56. (MIRA 10:1)

(CALVES) (STOMACH--INNERVATION) (GASTRIC JUICE)

IZHAYLOV, T. Z. —

"Investigation of the Operating Conditions of Turbine Drilling in the
'Kaganovichneft' (Petroleum) Trust." Cand Tech Sci, Azerbaydzhan Industrial
Inst imeni M. Azizbekov, 11 Oct 54. (BR, 5 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

~~IZMAYLOV, T.Z.~~, kandidat tekhnicheskikh nauk; SHAKHBAZ ENKOV, K.B., kandidat tekhnicheskikh nauk.

Effectiveness of turbodrill operation [in Azerbaijani with summary
in Russian] Azerb.neft.khos.35 no.11:13-16 N '56. (MIRA 10:4)
(Turbodrills) (Oil well drilling)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 8,
p 243 (USSR) 15-57-8-11702

AUTHOR: Izmaylov, T. Z.

TITLE: Effect of Mechanical Feeding on Operation of Turbine Drills (Vliyaniye mekhanizirovannoy podachi instrumenta na rezhim raboty turboburov)

PERIODICAL: Tr. Azerb. industr. in-ta, 1956, Nr 13, pp 75-80

ABSTRACT: Studies of the T14M1-9-3/4" and T12M2-10" turbine drills have shown the optimum speeds for their operation, at which their power is at the maximum, to be 550 to 650 rpm and 450 to 550 rpm. The torque developed by the turbine drill is 100 to 300 kg/m. An increase in axial loading, especially in drilling soft rock, produces a decrease in the number of revolutions and sometimes causes the turbine drill to stop. This makes it necessary to raise the turbine drill and lower

Card 1/2

15-57-3-11703
 Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
 p 243 (USSR)

AUTHOR: Izmaylov, T. Z.

TITLE: Effect of Axial Loading and Number of RPM on Efficiency
 of Turbine Drills (Vliyaniye osевой nagruzki i chisla
 oborotov turbokura na effektivnost' raboty koleta)

PERIODICAL: Tr. Azerb. industr. in-ta, 1960, Nr 13, pp 51-55

ABSTRACT: Investigations have established that direct proportion
 exists between the rate of drilling and the number of
 rpm within certain limits. V. S. Fedorov points out
 that further increase in rpm beyond a certain critical
 value will produce a smaller increase in rate of
 drilling than would correspond proportionally to the
 increase in rpm, and the efficiency of the drill will
 decrease. The critical number of rpm Θ_{kr} depends

Card 1/3

15-57-3-11703
 Effect of Axial Loading and Number of RPM (Cont.)

on the axial load on the drill, the resistance of the rock, and the
 construction of the drill. Θ_{kr} increases with an increase in axial
 loading; it decreases with an increase in resistance of the rock;
 it decreases with an increase in the coefficient of slip of the
 drill. L. A. Shreyner has established, on the basis of experimental
 investigations, that the total rate of rock penetration, that is,
 the rate of drilling, up to the critical rpm, increases in direct
 proportion to the increase in rpm. It is also known that the wear
 on the drill increases with an increase in the rpm. These relation-
 ships are confirmed by actual drilling experience. Thus, for
 example, according to the former Azneft' (State Association of the
 Azerbaidzhan Petroleum Industry), the mechanical rates in turbine
 and rotor drilling are almost equal; at the same time, the wear on
 the drill in turbine drilling is 1.5 to 2 times greater than with
 rotor drilling as a result of operation of turbine drills at rpm
 exceeding the critical. Investigations of M. M. Ivanov and K. P.
 Ponamarev show that the duration of action of the load affects the

Card 2/3

ISMAYLOV, Talyat Zeynalovich; SHAKHBAZBEKOV, Kynamil Boybala oğly.

[The technology of turbine drilling] Turbin gazynasynyn
tekinolokiiasy. Baky, Azerbaichan dovlat neft ve elmi-
tekiniki edebiiiat neshriiiaty, 1957. 219 p. [In Azer-
baijani]. (MIRA 12:1)

(Turbodrills)

KULIYEV, S.M.; MAMEDOV, A.B.; IZMAILOV, T.Z.; SHAKHRAZHUKOV, K.B.;
SHIKHALIYEV, F.A.; IOANNESYAN, R.A.; YAKH'YA ALI-TULLA OGLY

Sustaining formation pressure in gas-condensate pools by means of
water injection. Trudy Azerb. ind. inst. no.19: 65-101 '57.
(MIRA 11:9)
(Apscheron Peninsula--Condensate oil wells)

IZMAYLOV, T.Z.; SHIKHALIYEV, F.A.

Calculating casings for extra deep wells. Izv. vys. ucheb. zav.;
neft' i gaz 5 no.6:29-33 '62. (MIRA 16:5)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Oil well casing)

IZMAYLOV, V., kapitan

An outstanding team. Kryl.rod. 14 no.9:12-13 S '63.(MIRA 16:9)
(Flight crews)

IZMAYLOV, V., kapitan

Operators of "Vostok." Starsh.-serzh. no.8:6 Ag '61.(MIRA 14:10)
(Radar, Military)